# Old Company Name in Catalogs and Other Documents

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Renesas Electronics website: http://www.renesas.com

April 1<sup>st</sup>, 2010 Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (http://www.renesas.com)
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# 通用运算放大器、比较器

以共计8种的单板电源运算放大器、比较器以及低噪声运算放大器为应用对象,并且将其的小型封装型产品研发、产品化(尚有6种产品在开发中)。

在保持以往的功能的同时,将封装的管脚间距缩短为0.65mm,由于将封装的横幅缩短,与以往的标准型SOP封装产品相比,其安装面积缩小了40~50%\*。并且,为了更容易地对应客户的使用环境,扩大了产品的工作温度范围(如下所示)。

## 特征

- ■缩小印刷线路板的安装面积,为组件的小型化作出贡献
- ■通过在管脚采用铜系材料,与以往的SOP封装产品相比, 小型且减少了大约10%的热敏电阻
- ■由于在产品系列中同时新增了8品种的产品,因此组合使用时可以使组件更加小型化
- ■扩大了工作温度范围(普通型产品: -40~+85°C、温度扩展型产品: -40~+125°C)

## 应用

普通型产品: 适用于产业、民用设备的模拟信号处理(传感器信号的放大与判别、过滤器电路等)

温度扩展型产品: 适用于产业、车载设备等特别是需要宽工作温度范围的使用用途

## 产品规格概要

运算放大器(普诵型产品)

类型	产品名	电路数	电源电压(V)	工作温度(°C)	V <sub>IO</sub> [max] (mV)	Iв [max] (nA)	Icc [max] (mA)	SR[typ] (V/μs)	管脚数
单板电源	μPC358GR-9LG	2	32	-40~+85	±7	250	1.2	0.25	8
	μPC324GR-9LG	4	32	-40~+85	±7	250	2	0.25	14
高速单板电源	μPC4742GR-9LG	2	36	-40~+85	±4.5	500	5.5	8.5	8
	μPC4744GR-9LG	4	36	-40~+85	±6	500	11	8.5	14
低噪声	μPC4570GR-9LG	2	36	-40~+85	±5	400	8	7	8
	μPC4574GR-9LG	4	36	-40~+85	±5	1000	12	6	14

#### 运算放大器(温度扩展型产品)

类型	产品名	电路数	电源电压(V)	工作温度(°C)	V <sub>IO</sub> [max] (mV)	I <sub>B</sub> [max] (nA)	Icc [max] (mA)	SR[typ] (V/μs)	管脚数
单板电源	μPC1251GR-9LG	2	32	-40~+125	±7	250	1.2	0.25	8
	μPC451GR-9LG	4	32	-40~+125	±7	250	2	0.25	14
高速单板电源	μPC842GR-9LG	2	36	-40~+125	±4.5	500	5.5	8.5	8
	μPC844GR-9LG	4	36	-40~+125	±6	500	11	8.5	14

#### 比较器(普通型产品)

类型	产品名	电路数	电源电压(V)	工作温度(°C)	V <sub>IO</sub> [max] (mV)	I <sub>B</sub> [max] (nA)	Icc [max] (mA)	响应时间 [typ] (μs)	管脚数
单板电源	μPC393GR-9LG	2	36	-40~+85	±5	250	1	1.8	8
	μPC339GR-9LG	4	36	-40~+85	±5	250	2	1.6	14

## 比较器(温度扩展型产品)

类型	产品名	电路数	电源电压(V)	工作温度(°C)	V <sub>IO</sub> [max] (mV)	I <sub>B</sub> [max] (nA)	lcc [max] (mA)	响应时间 [typ] (μs)	管脚数
单板电源	μPC277GR-9LG	2	36	-40~+125	±5	250	1	1.8	8
	μPC177GR-9LG	4	36	-40~+125	±5	250	2	1.6	14

# **NEC Electronics**

Website: www.necel.com

# 采用TSSOP封装来实现产品的 小型化、薄型化

管脚数	现行SOP (管脚间距:1.27mm)	TSSOP (管脚间距:0.65mm)	面积比例 [()内为缩小率]
14pin	0 10 2±0.26	5±0.1	61% (49%)
8pin	6.2 d 30 d 3	9 4 4 0 5 4 1 0 5 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1	59% (41%)

<sup>\*</sup>与本公司以往产品相比

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